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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,005

Applicant(s)

SHIH, JERRY

Examiner

Mounir Moutaouakil

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed 11-09-2007 has been entered and considered.

Claims 1-20 are pending in this application.

Claims 1-20 remain rejected as discussed bellow.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7- 10, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bi et al (US 6,353,599). Hereinafter referred to as Bi.

Regarding claim 1. For use in a wireless network comprising a plurality of wireless communication devices. Bi discloses an interrogating state machine that comprises a server status store operable to store server status information for each of a plurality of servers (see figure 67, and col.57, lines 8-34, and col.57, line 66-67, element 109) , the server status information for each server comprising load information for the server (col.58, lines 41-65, fig.69); and a server assigner operable to collect server status information from the servers (Col.62, lines 3-13. the system stores the load of each server and makes the makes the server with the smallest load available), to store the server status information in the server status store (Col.62, lines 3-13, the system must store the information of each server to make the server with the smallest load

available), and to assign one of the servers to host one of the wireless communication devices based on the server status information (Col.62, lines 3-13, the wireless device is assigned the least loaded server).

Regarding claim 2. Bi discloses an interrogating state machine. The server status information stored in the server status store collectively forming a system status (Col.62, lines 3-13), the server assigner operable to assign one of the servers to host one of the wireless communication devices based on the system status (Col.62, lines 3-13).

Regarding claim 3. Bi discloses an interrogating state machine. The server assigner further operable to receive a registration request from the one of the wireless communication devices and to assign one of the servers to host the wireless communication device based on receiving the registration request (Fig.67, and Col.62, lines 3-13).

Regarding claim 7, 9 and 14. Bi discloses an interrogating state machine. The server assigner comprising: a status collector operable to collect the server status information from the servers and to store the server status information in the server status store (Fig.67, and Col.62, lines 3-13); and a server selector operable to access the server status store based on receiving a registration request from the one of the wireless communication devices and to select one of the servers based on the server status information in the server status store (Fig.67, and Col.62, lines 3-13), the server assigner operable to assign the server selected by the server selector to host the wireless communication device (Fig.67, and Col.62, lines 3-13).

Regarding claim 8. Bi discloses a wireless network (Fig.67), comprising: a plurality of servers, each server having a varying server status (Fig.67, and Col.62, lines 3-13), the server status for each server comprising load information for the server (Fig.67, and Col.62, lines 3-13), the server statuses of the servers collectively forming a varying system status (Fig.67, and Col.62, lines 3-13); and at least one interrogating state machine operable to receive a registration request from one of a plurality of wireless communication devices and (Figs.67, 69, and Col.62, lines 3-13), based on the registration request, to assign one of the servers to host the wireless communication device based on a current system status, the current system status based on the varying system status (Fig.67, and Col.62, lines 3-13).

Regarding claim 10. Bi discloses a wireless network (Fig.67). The server assigner further operable to receive the registration request from the wireless communication device (Fig.67, each wireless device has to register in order to be granted a service).

Regarding claim 16. Bi discloses a method for assigning one of a plurality of servers to host a registration for a wireless communication device. The method comprises receiving a registration request from the wireless communication device (Fig.67, and Col.62, lines 3-13); and assigning one of the servers to host the wireless communication device based on server status for each of the servers (Fig.67, and Col.62, lines 3-13), the server status for each server comprising load information for the server (Fig.67, and Col.62, lines 3-13).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bi.

Regarding claim 15. Bi discloses a wireless network wherein interrogating state machine operable to receive a registration request from one of the wireless communication devices (Fig.67, and Col.62, lines 3-13). and, based on the registration request, to assign one of the servers to host the wireless communication device based on the current system status (Fig.67, and Col.62, lines 3-13).

Bi does not explicitly disclose that the system comprises a plurality of interrogating state machines. It is generally considered to within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The Burden of showing the criticality is on applicant. In re Mason, 87 F.2d 370, USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. V. U.S., 320 US 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6(CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since the number of interrogating state machines is not critical to the system, it

would have been obvious to vary the number of interrogating state machines per system to be any number, including one state machine.

5. Claims 5, 6, 12, 13, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bi in view of Jayaraman et al (US 2003/02106694). Hereafter referred to as Jayaraman.

Regarding claims 5, 12. Bi discloses all the limitation of the parent claim.

Bi does not disclose that the table comprises a server column operable to identify the servers and a first server status information column operable to provide first server status information for the corresponding server identified in the server column.

However, Jayaraman discloses a method of storing the status information of each server within a table (see figure 9). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the system status table, as taught by Jayaraman, into the wireless network of Bi for the purpose of organizing the statuses retrieved from the servers.

Regarding claims 6, 13. Bi discloses all the limitation of the parent claim.

Bi does not disclose that the table further comprising a second server status information column operable to provide second server status information for the corresponding server identified in the server column, the first server status information comprises load information and the second server status information comprises capability information.

However, Jayaraman discloses a system where the status collector comprises multiple tables for different information regarding each server in the network (figures 9, 10, 11).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the information tables, as taught by Jayaraman, into the wireless network of Bi for the purpose of organizing the statuses retrieved from the servers.

Regarding claim 17. Bi discloses a wireless network where the network receives and stores statuses received from the plurality of servers (Fig.67, and Col.62, lines 3-13).

Bi does not disclose requesting a server status from each of the servers and receiving server statuses from at least a portion of the servers. However, Jayaraman discloses a method where the server requests and retrieves servers' statuses (see paragraph 0098). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the method of retrieving server statuses from the servers in communication with clients, as taught by Jayaraman, into the wireless network of Bi for the purpose of enhancing the network and increasing network efficiency.

Regarding claim 18. Bi discloses a wireless network that further comprises accessing the stored server statuses based on receiving the registration request (Fig.67, and Col.62, lines 3-13); selecting one of the servers based on the stored server statuses; and assigning one of the servers to host the wireless communication device comprising assigning the selected server to host the wireless communication device (Fig.67, and Col.62, lines 3-13).

Regarding claim 19. Bi discloses all the limitations of the parent claim.

Bi does not explicitly disclose receiving updated server statuses from at least a portion of the servers; and storing the updated server statuses in place of the previously stored server statuses. However, Jayaraman discloses a method of retrieving different types of information from multiple servers and storing them on the regular basis in information tables (see paragraph 0098, fig 9, 10, 11). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the method of retrieving different types of information from multiple servers and storing them on the regular basis in information tables, as taught by Jayaraman, into the wireless network of Bi for the purpose of enhancing the network and increasing network efficiency.

Regarding claim 20. Bi discloses a wireless network that further comprises requesting updated server statuses from at least a portion of the servers (Fig.67, and Col.62, lines 3-13).

6. Claims 4 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Bi in view of the admitted prior art, APA, of Shih.

Regarding claims 4 and 11. Bi discloses all the limitations of the claimed invention with the exception that the servers comprise a serving call state control function (S-CSCF), the S-CSCF operable to enable provision of internet protocol multimedia domain (IPMMD) services for the wireless communication devices that the S-CSCF is assigned to host. However, the Background of Shih teaches that every

server comprises a S-CSCF capable of providing IPMMD services for the wireless devices (paragraphs [0002]-[0004]). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to employ the S-CSCF to provide IPPMMD services to the wireless devices, as taught by the APA, into the wireless network of Bi for the purpose of converging IP and telecom services.

Response to Arguments

7. Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

When responding to this office action, applicants are advised to clearly point out the patentable novelty which they think the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicants must also show how the amendments avoid such references or objections. See 37C.F.R 1.111(c). In addition, applicants are advised to provide the examiner with the line numbers and pages numbers in the application and/or references cited to assist examiner in locating the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mounir Moutaouakil whose telephone number is 571-

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270-1416. The examiner can normally be reached on Monday-Thursday (1pm-4: 30pm) eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MM
Mounir Moutaouakil
Patent Examiner
02-15-2008



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